

Title (en)
LOAD STRAPPING MEANS FOR PALLETS

Title (de)
LASTENBEFESTIGUNGSVORRICHTUNG FÜR PALETTEN

Title (fr)
MOYENS DE SANGLAGE DE CHARGES POUR DES PALETTES

Publication
EP 1289850 A1 20030312 (EN)

Application
EP 01914057 A 20010327

Priority
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• GB 0014657 A 20000616
• GB 0014658 A 20000616

Abstract (en)
[origin: US2004101380A1] Load strapping means for use with 4-way pallet comprises a cap (11) for placing on a load (17) on a 4-way pallet (16), at least two strapping strands (15) retractable through openings (26) into housings (14) at opposite sides (at least) of the cap, spring means within the housings for retracting the strapping strands, hooks (18) on the free ends of the strapping strands for engagement with the underside (21) of the platform (22) of a 4-way pallet, tensioning means within the housings for tightening the strapping strands between the cap and the pallet after interposing a load between the cap and the pallet, and stop means (34) for limiting retraction of the hooks into the housings when not engaged with a pallet. Such a cap (11) can be used without need to modify existing 4-way pallets, particularly-but not exclusively-those made of wood. Each hook (18) preferably has two prongs (19) spaced apart so as to fit one to each side of a middle spacer (20) of a 4-way pallet, without being in danger of damage or dislodgement by the forks of a fork-lift truck.

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Cited by
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